TSM Alternative (replaces section on Pages 2-3 and 2-4)

~~In~~ During the Alternatives Analysis phase, the TSM Alternative was developed to evaluate how well a combination of relatively low cost transit improvements could meet the study area's transportation needs. FTA requires that the TSM Alternative reflect the best that can be done for mobility without constructing a new transit guideway. Bus service was optimized, per FTA guidelines, by increasing bus service, but without building a new fixed guideway for transit, such as a system of dedicated bus lanes. The analysis demonstrated that the purpose and need for the project could not be met through a lower cost bus-based alternative alone.

After consideration of various service options and operating plans, the TSM Alternative was designed to serve the study corridor based on a hub-and-spoke network of bus routes, similar to today. Bus frequencies would have been increased during peak periods to provide improved service for work related trips, particularly from developing areas such as Royal Kunia, Koa Ridge, and Waiawa. The bus fleet was assumed to increase from 525 to 765 buses, and park-and-ride lots were assumed at West Kapolei, UH West O'ahu, Waipio, and Aloha Stadium. In addition, the present a.m. peak-hour-only zipper lane would have been modified to operate in both the a.m. and p.m. peak periods, and relatively low-cost improvements would have been made on selected roadways to give priority to buses.

The analyses found that the TSM Alternative would have improved transit travel times somewhat, by reducing the amount of time riders would have to wait for a bus to arrive at a bus stop. As a result, the TSM Alternative would have led to a slightly larger number of daily transit trips than the No Build Alternative (Table 2-1). This alternative would have generated fewer hours of transit user benefits than either the Managed Lane or Fixed Guideway Alternative. Since most buses would still operate in mixed traffic, the TSM Aalternative would have done little to improve corridor mobility and travel reliability. Roadway congestion would not have been alleviated. In addition, because of the dispersed nature of transit service, slow bus speeds and unreliable service, the TSM Aalternative would not have supported the city's goals of concentrating growth within the corridor and reducing development pressures in rural areas.

In terms of its environmental impacts, the TSM Alternative world have generated fewer physical impacts than the Managed Lane and Fixed Guideway Alternatives. However, it would have required more transportation system energy and generated more air and water pollution thant the Fixed Guideway Alternative.

Although the TSM Alternative would have been very cost-effective, primarily because of its low cost, financial feasibility was a concern. Current~~,~~ State legislation does not allow the ~~local~~ excise and use tax surcharge to be used for enhancement of the existing bus transit system.

Managed Lane Alternative

Insert ~~to~~ after first sentence of first full paragraph on Page 2-5~~middle of last paragraph…~~

Because the Managed Lane Alternative would have served a shorter portion of the study corridor, it would have resulted in fewer displacements and would have impacted fewer historic, cultural, and archaeological resources than the Fixed Guideway Alternative. The Managed Lane Alternative would not have affected any farmlands. Visually, the elevated structure would have extended a shorter distance, but it would have been more visually intrusive because its elevated structure would have been much wider than the Fixed Guideway Alternative.